
Variability of ESL Learners' Acquisition of Cognitive Academic Language Proficiency: What Can We Learn From Achievement Measures?

Hetty Roessingh and Pat Kover

With the revamping of the Canada Immigration Act in 1985, the demographic profile of new arrivals to Canada took a marked shift to place a priority on better educated, business-class immigrants. Most of these immigrants are from the Pacific Rim, and they have high expectations for the academic achievement of their children in the Canadian school system. The purpose of this study was to look at age on arrival and first-language proficiency of these children, as these factors interact with instructed ESL support on achievement measures in grade 12. Analysis of the data reveals that although all learners benefit from structured ESL support, it is the younger-arriving ESL learners who have the most to gain, even after many years of little or no support. We note that all ESL learners, regardless of age on arrival, struggle to acquire the cultural and metaphoric competence that is beyond the linguistic threshold required for success, but nevertheless central to successful engagement in a literature-based program of studies.

La refonte en 1985 de la Loi sur l'immigration au Canada a entraîné une modification du profil démographique des nouveaux arrivants au pays du fait qu'elle favorise les immigrants mieux instruits et les gens d'affaires. La plupart de ces immigrants proviennent du littoral pacifique et ils entretiennent des attentes élevées quant au rendement scolaire de leurs enfants au sein du système scolaire canadien. Le but de cette recherche était d'étudier l'âge de ces enfants à leur arrivée au Canada et leur compétence dans leur langue maternelle, ces deux facteurs agissant, avec un appui formel en ALS, sur les résultats obtenus aux évaluations en douzième année. L'analyse des données a indiqué que tous bénéficient d'un appui formel en ALS mais que ce sont les nouveaux arrivants les plus jeunes qui en profitent le plus, même après des années sans appui ou avec un appui minimal. Tous les apprenants en ALS, peu importe leur âge à l'arrivée au Canada, éprouvent de la difficulté dans l'acquisition d'une compétence culturelle et métaphorique qui, tout en dépassant le seuil linguistique nécessaire à la réussite, demeure essentiel à la participation réussie à un programme d'études à base littéraire.

The demographic landscape of Canada has changed markedly in the past 15 years as a consequence of federal immigration policies. In short, Employment and Immigration Canada (1985) sought to identify, select, and recruit the world's "brightest and best" as a strategy for future human resource renewal and as a catalyst for competition in the global economy of the 21st century. A new class of immigrant was introduced under this policy framework: business (investment and entrepreneur). Most of these new Canadians have arrived from the Pacific Rim, and indeed they represent a brain gain for Canada (Baxter, 1999; Summerfield, 2002).

The effect of these reforms on our immigration policy on the nation's classrooms has been unmistakable. From 25% to over 50% of children in major urban jurisdictions (Calgary, Toronto, Vancouver) are of an English-as-a-second-language (ESL) background (Dawson, 1998; McInnes, 1993; Rinehart, 1996). They are distributed approximately evenly throughout the K-12 system. An entire generation of youngsters for whom English is a second language has passed through our classrooms since the 1985 revamping of the immigration plan. The expectations many (business class) immigrant parents have for their children include academic success in the K-12 school system and eventual university enrollment (Zhang, Ollila, & Harvey, 1998). Considerable pressure is placed on the students, both by their parents and by themselves, to achieve these academic expectations (Chow, 2000). Most striking about these children is that despite the similarity of expectations for their achievement, their learning outcomes show significant variability as reflected in standardized achievement measures.

Our research question relates to this variability and unevenness in learner profiles among academically competent ESL learners: their educational trajectory as they attempt to beat the academic time clock while they are developing their English language proficiency and the associated underlying abstract concepts, and the instructional supports that must be in place for them to realize this multifaceted challenge. The following is a report of a collaborative effort between two colleagues: an ESL teacher and English department head. The purpose of this article is to examine the effects of a general curriculum framework implemented to mediate the demands of a sequence of courses in the high school English literature program that are required for university entrance in Alberta. All universities in Canada have some type of English-language proficiency requirement, usually demonstrated by successful completion of a high school English literature course (accompanied by a provincially set diploma examination). For ESL learners, therefore, grade 12 English is a high-stakes course: it performs a gatekeeping function for entry into postsecondary programs of study. Although approximately 90% of those who attempt grade 12 academic English pass the examination (Alberta Learning, 2002), ESL learners are vastly overrepresented among the failures, and further they are underrepresented in the participa-

tion rates in grade 12 English due to poor retention rates from grade 10 to grade 12 (Watt & Roessingh, 2001).

We begin with background information that identifies the significant variables in the development of cognitive academic language proficiency among ESL learners. Next we present the learner profiles of four cohorts of ESL learners who attended our school between 1997 and 2002. Then we describe the context of our work: our school demographics and school culture. We describe the instructional supports offered throughout grades 10-12 for the ESL students. We report all the students' final marks on the grade 12 English examination. We interpret and discuss these results in the light of the learner profiles we had developed. We raise questions that we hope others will take up in understanding what it means to be academically competent for ESL learners studying in the context of the culture of Canadian high schools and universities. We conclude that as caring educators we must position ourselves at these critical gates and advocate on behalf of our ESL learners for policy reforms that will afford equitable access to the opportunity structure of society that only advanced (university) studies will bring. Our findings suggest that instructed ESL support makes the difference between those who pass through the gates and those who do not.

Background

ESL learners are not monolithic in character. Even among those seen to be academically proficient, there is significant variability in the learner profile that will have consequences for how the individual learns, the rate of second language (L2) acquisition, and the level of eventual achievement relative to academic endeavors in school. The crucial learner variables identified by numerous researchers in the field (Collier, 1995; Klesmer, 1994; Cummins, 1981; Roberts, 1994; DiCerbo, 2000) include level of first language (L1) proficiency and age on arrival. From an instructional perspective, quality and duration of structured ESL support have a further effect on students' eventual levels of achievement (Thomas & Collier, 1997; Roessingh & Kover, 2002; Lucas, Henze, & Donato, 1990). We begin by considering the closely intertwined learner variables of L1 proficiency level and age on arrival.

Cummins (1996) posits a common underlying proficiency (CUP) model in which literacy-related aspects of a bilingual's proficiency in L1 and L2 are seen as common or interdependent across languages. The CUP model of the linguistic interdependence principle is illustrated in the metaphor of an iceberg. For fully bilingual individuals, the two visible peaks of the iceberg are equal. But these are only "the tip of the iceberg." Much more significant is what is not seen: the below-the-surface cognitive academic language proficiency related to a much larger mass that is generally not manifest in daily communicative exchanges. In the depths of this model, we would locate the

higher-order thinking skills of analysis, synthesis, integration, reasoning, generalizing, and transferring, for example.

The dual threshold theory posits that when both languages eventually reach equal levels and there is a large below-the-surface mass, benefits accrue to those individuals over their unilingual counterparts. The model is depicted in Figure 1.

The surface features of L1 and L2 are those conversational features that have become relatively automatized or less cognitively demanding whereas the underlying proficiency is that involved in cognitively demanding tasks. Although the surface aspects (e.g., pronunciation, fluency, etc.) of different languages are clearly separate, there is an underlying cognitive/academic proficiency that is common across languages. (Cummins, 1996, pp. 110-111)

These surface features have been called basic interpersonal communication skills (BICS). There is general consensus in the field that this level of proficiency in L2 can be developed in a relatively short time (i.e., about two years) for all ages of ESL learners. Our daily communicative tasks can be accomplished with perhaps 2,500-5,000 words of English. Academically proficient high school students, on the other hand, accomplish their work with approximately 40,000 words of English (Miller & Gildea, 1987). The metaphor of the iceberg, where the visible aspect comprises only about 10% of the whole, appears apt.

There is less consistency among academics concerning the threshold and the time it takes to reach the level of critical transfer between languages for successful engagement in academic demands of school associated with cognitive academic language proficiency (CALP). Collier (1995) suggests a grade

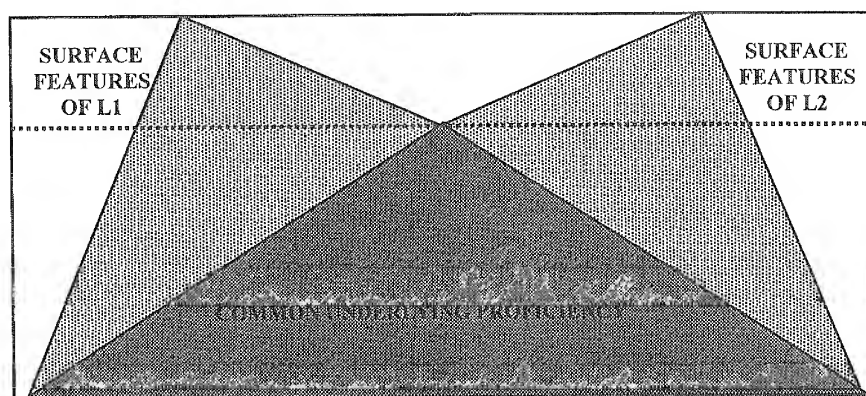


Figure 1. The "dual iceberg" representation of bilingual proficiency (Cummins, 1980, p. 36; 1996, p. 111).

equivalent (GE) of four as the linguistic threshold required in L1 for smooth transfer to L2 of underlying concept understanding central to cognitive development, and that this level can be attained (and sustained) after four to five years of schooling in both languages. Two-way bilingual programs are seen as holding the most promise for facilitating the development of full and balanced bilingualism (as seen in the iceberg model). In a recent study, Hakuta, Butler, and Witt (2000) suggest a range of four to seven years for the development of academic English proficiency.

The reality for many ESL learners in many school jurisdictions across Canada and the United States, however, does not look like the iceberg depicted in Cummins' (1980, 1996) model. For reasons of political expedience and budgetary constraints in education, the vast majority of ESL learners do not have the opportunity to participate in quality, well-designed, and professionally staffed two-way bilingual programs. Moreover, their ESL programs have been the target of budget cutbacks over the past decade (Neu & Taylor, 2000; Derworiz, 2001). In the following section we develop and illustrate learning profiles of ESL students who arrive at different ages and hence different stages in their L1 development. We frame our discussion of the educational risk for each learner profile around what we imagine their iceberg model to look like. Our hope is that through the visual representation of L1 and L2 development using the iceberg metaphor, our strategy for intervention will become clearer.

Some Learner Profiles of ESL students

Figure 1 illustrates the profile of a balanced bilingual learner: one who presumably is successful in developing full academic proficiency in both L1 and L2. Here we attempt to depict the learner profiles of ESL students with varying degrees of L1 and L2 proficiency. The profiles provide concrete visual representations for the accompanying text explaining the challenge that these students face.

For younger-arriving as well as for Canadian-born ESL students, the challenge of "growing" their first language while developing ESL is often overwhelming. De Vries (1999) notes a gradual loss, or at the minimum a low plateau in L1 ("kitchen Chinese"), and the inability of L2 (ESL) to overcome to any significant extent this low plateau, resulting in "schoolyard English." Although these students "sound good" in English, there is little below the level of the waterline in the iceberg model.

This phenomenon, called bilingual semi-lingualism, was noted and described in various contexts in other countries more than two decades ago (Skutnabb-Kangas, 1981). It may be likened to a blackberg: a dangerous kind of iceberg. The exposed portion of the berg melts in the sun, losing mass at the level of the water line (i.e., subtractive bilingualism) as it is carried by the Gulf Stream toward warmer climes. With the center of gravity heightened,

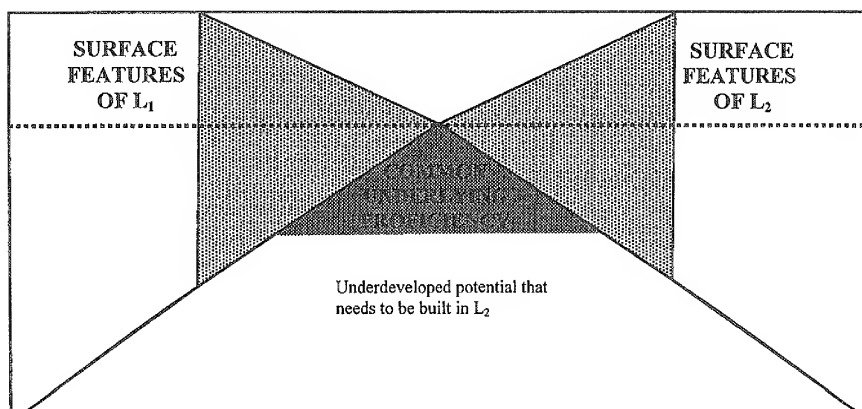


Figure 2. Cohort A. Young arrivals: Low levels of L1 and L2 (balanced but inadequate bilingualism). Cummins, J. (1984). Bilingualism and special education: Issues in assessment and pedagogy. London: Multilingual Matters, p. 143. Reprinted with permission.

the entire berg topples over to expose the transparent icy underside: there is simply not enough under-the-surface mass to stabilize the berg as it journeys and tumbles along. The berg that dealt a devastating blow to the Titanic is thought to be this type: the lookout, Frederick Fleet, was unable to discriminate the exposed piece from the underside of the blackberg in the clear of that April night in 1912 (Ballard, 1987). In other words, the exposed and the invisible portions are about equal: one is mirrored in the other, and what is exposed is all there is.

ESL students of this profile are at high risk for academic failure (Roessingh & Kover, 2002). The impoverished levels of both L1 and L2 means there

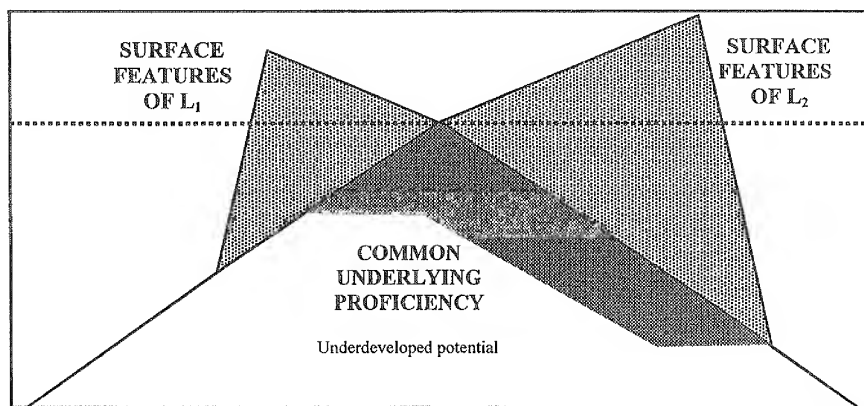


Figure 3. Cohort B. Young arrivals: Low L1, better developed L2.

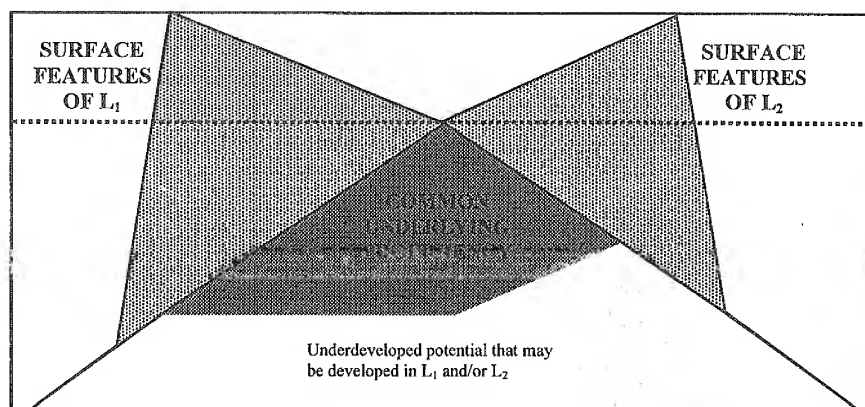


Figure 4. Cohort C. Junior high arrivals: uneven L1 and L2.

is little beneath-the-surface transfer, and the higher-order thinking skills of reasoning, integrating, synthesizing, hypothesizing, analyzing, and imagining, for example, are left under developed. And sounding good only compounds their problems in school, as so many of these students' teachers will attribute their academic failure to a cognitive impediment (i.e., little beneath the surface). Disproportionate numbers of students of this profile will find themselves (often wrongly) relegated to nonacademic track studies in high school, special education placements, failure, and dropout (Oakes, 1993). The blackberg metaphor seems to be a fitting description of the learner profile of the younger arrivals.

Sometimes young arrivals receive ESL support to the degree that L2 becomes the dominant language and is developed to a level sufficient for academic success in the context of high school and university. Sometimes young arrivals survive in the school system despite the lack of ESL support. This is a significant challenge for these students because they do not have recourse to their first language to facilitate cognitive development in the second: in sum, they must pull on the harness with double the effort in order to develop both language and the associated concepts in English. Unless these students are identified for ESL support (Roessingh & Kover, 2002), we have little insight into their educational experiences, their successes, and failures.

ESL learners who arrive in the junior high school years (grades 7-9) have more developed L1 and may have acquired some English language proficiency before their arrival by way of EFL (English as a foreign language) studies in their home country. These students are at risk in that they do not have full linguistic and cognitive maturity in L1 and now must pursue academically demanding content-area studies in a language they do not have under control. Moreover, many of these students may not have access to

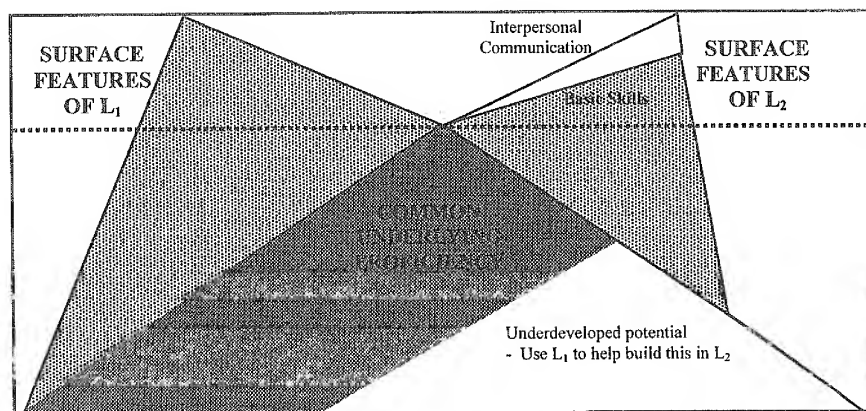


Figure 5. Cohort D. Older arrivals: full L1 proficiency, intermediate L2 proficiency.

quality ESL programs in their local school in Alberta where there is no mandated ESL curriculum at this level.

These junior high arrivals (aged 12-15) face an enormous challenge. They must work hard to beat the academic time clock. Most tracking data that suggest a time frame of four to seven years to compete academically would place these students at high risk for failure in Canadian English-speaking school settings. With hard work and well-designed programmatic supports, these students may finish “under the wire” and continue developing CALP-like proficiency over time in a university setting.

ESL learners who arrive at the age of 15-16 from the Pacific Rim typically have studied English to the level of Intermediate (reading GE 5) and have full cognitive academic language proficiency in L1. In fact, in various content areas of study (typically sciences and mathematics) they are advanced. These students have a significant gap to close in only three years if they wish to pass the provincially mandated English literature examination and register for university. However, they have advantages that the junior high and elementary-aged arrivals (as well as the Canadian-born) do not possess, that is, beneath-the-surface CALP-level proficiency in L1 that will transfer and support the development of CALP in L2. Perhaps the biggest challenge these learners face is finding the courage to develop interpersonal communication skills and strategies (they have the basic skills of the BICS equation developed from text book learning of English as a foreign language—EFL). The other challenge is to beat the academic time clock.

These students have a good chance of academic success. In the case of just-right teaching and placement decisions, it becomes clear that understanding minimum threshold levels is critical to these students’ success. Their ongoing development of CALP-like proficiency in English will take

many years beyond high school, and transitional programming/counseling to carry them into university settings may be helpful. Others remain at risk and may never reach the threshold required to graduate from university.

Although the learner profiles described above all share the common characteristics of approximately similar above-the-surface BICS proficiency in English, it becomes clear that the below-the-surface unevenness in their development of CALP-like proficiency in L1 will have an enormous effect on instructional considerations.

The Context of Our Work: Site Description, Participants, Research Question

The study took place in a small academically oriented high school in a large urban setting. There are approximately 1,200 students, evenly divided between junior high (grades 7-9) and senior high (grades 10-12): the only school in the city that accommodates both junior and senior high students. The school is centrally located in the city core. The immediate neighborhood children whom the school initially served have long since grown up and moved on. The school now houses a variety of what may be called "specialty" programs—ESL, Deaf and Hard of Hearing (DHH), Gifted and Talented (GATE)—to augment the neighborhood enrollment figures in the school's catchment area. The vast majority of students arrive by bus. The school operates on a semester system—well suited to the work at hand.

An ESL program was introduced in September 1997 to serve approximately 85 students: almost exclusively the children of business-class immigrants who had recently arrived from the Pacific Rim. Most of these students arrived in their grade 10 year, aged 16, and spoke Cantonese as their first language. They were academically competent and "in a hurry" to get to university. In subsequent years, the ESL program began to experience intake of ESL learners from the junior high level (grades 7-9) who were still eligible for ESL funding and were identified by their teachers as needing ongoing support through high school. Many of these students were the younger siblings of older-arriving ESL learners identified in Table 1.

A look in the school cafeteria or any hallway of the study site reveals a significant proportion of visible-minority students, perhaps as many as 300 (25% of the school population). Although some of these students are Canadian-born Chinese ("CBC" kids, as the newly arrived students called them), a significant number are young-arriving ESL learners, long since dropped from any official funding list and for all intents and purposes no longer recognized as ESL students, often not even by themselves. They remain at academic risk nevertheless. Increasingly, as a consequence of monitoring grade 9 and grade 12 achievement measures for students of this learner profile, we sought to identify those most in need of instructional support to succeed with the academic demands of high school English literature

Table 1
Profile of Four Cohorts of ESL Learners (Successful Graduates): 1997-2002

<i>Cohort</i>	<i>Immigrant Class</i>	<i>Age on Arrival</i>	<i>Risk Profile</i>
A N=6	Business	Elementary	Little or no ESL support. Academic expectations but marginal performance throughout high school in English literature courses. Approximate reading equivalent 5 on entry into grade 10. Failure and dropout of program at university level.
B N=8	Business	Elementary	Little or no ESL support. Academic expectations. At risk for academic failure in high school. Approximate reading GE 5 on entry into grade 10. ESL support offered to this cohort for grades 10-12.
C N=18	Business	Junior High	Varying amounts and types of ESL support. Academic expectations. At risk for academic failure in high school. Approximate reading GE 5 on entry into grade 10. ESL support offered throughout grades 10-12.
D N=19	Business	Senior High	New arrivals to Canada. Academically competent, "in a hurry" to go to university. Approximate reading GE 5 on arrival. ESL program designed to support academic goals.

studies. By September 2000, we had identified 50 students of this profile. They were integrated with the older-arriving students into the ESL program to receive upgrading ("skills booster"), academic transitional, sheltered/adjunct, and tutorial support throughout high school.

Table 1 summarizes the learner profile of these cohorts of ESL learners. By June 2002, 51 ESL learners had graduated from our school. In the five years of our work, all the ESL learners who attempted grade 12 English passed.

Note that all the students demonstrated roughly a high intermediate level of English language proficiency on intake into grade 10. That is, they had reading skills of approximately a grade equivalent of 5, vocabulary estimated at approximately 5,000-8,000 words (perhaps as high as 15,000 words for cohorts A and B, but still well below the 40,000 words of their academic grade 10 native English speaking counterparts), and basic control of grammar and spelling. The most striking difference, of course, was that the younger-arriving students "sounded good." Not visible from the profiles above is the beneath-the-surface underlying proficiency that the older students clearly had developed in L1 before their arrival, but that the younger-arriving students, as we were soon to discover, did not have. It is important to recall the shapes of the iceberg models at this point to understand our instructional challenges in dealing with such diversity, even among learners

who we knew were academically competent and, on the surface at least, all starting from approximately the same place.

Our research question was related to the instructional strategies that would support the development of the various aspects of cognitive academic language proficiency for the various learner profiles we describe above. Would it be possible to differentiate instruction and target learning strategies appropriately to “teach for transfer” for the older students, and “build up from the bottom” for the younger arrivals? In short, could we make our lessons “big enough” to suit the needs of all?

Intervention

Early on we recognized that the academic goals of our students were ambitious even for academically competent learners. The start point: measured achievement in reading at GE 5 for students entering grade 10 equates to about the 15th percentile; the goal: to compete at the estimated 65th percentile in five semesters. Clearly the learning curve would have to be steep indeed. To frame our thinking about the various learning needs of our students, we adopted a tridimensional model.

The development of academic proficiency comprises three elements: language, concepts, and learning strategies. These are contextualized by way of selected content, for example, in an ESL setting or the English language arts program. Content is a vehicle for developing the embedded elements. Figure 6 illustrates this three-dimensional model.

This model guided our thinking about the needs of our learners and allowed us to refocus and adjust our instructional approaches as the needs of

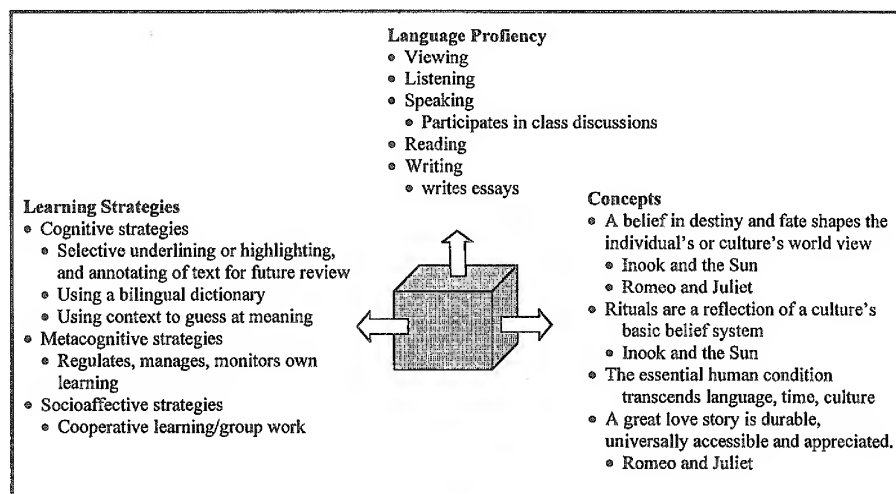


Figure 6. Model for developing academic proficiency (Roessingh, 1995).

our learners evolved and shifted in the developmental continuum of their growth toward CALP level proficiency. Salient features of our work at the program level included:

- “Skills booster” semester and “Transitional academic” semester (grade 10) focused on developing CALP-like proficiency required for abstract content materials (and GE 7 on a standardized reading measure).
- “Sheltered English 10” together with an “Adjunct ESL” block to ensure ongoing development of academic writing skills (Roessingh, 1999).
- Tutorials in grade 11 and 12 to complement the demands of the literature courses.

The overall ESL program provided for 625-750 contact hours throughout grades 10-12 to support the development of English language proficiency. The provincial ministry’s accredited ESL program provides for only 375 instructional hours, thus an administrative challenge was to bury the additional contact hours into recognized credit courses that could be reallocated to ESL learners’ needs (e.g., reading, special projects).

General instructional-level considerations included, most important, a focus on direct and explicit language, concepts, and strategies instruction. Beyond the skills booster and transitional academic skills development courses (grade 10), we highlighted the connection between the ESL support (adjunct/sheltering, tutorials) and the students’ English literature courses. At this level, the following features of instruction are worth mentioning: the extensive use of collaborative learning groups; portfolio work; instructional conversations focused on “essential questions”; mini-conferencing with students to focus on particular aspects of their written work; a process approach to their written work—with care to get a good sense of “where the students were at” by collecting work completed in class; careful monitoring and feedback given to students on progress using standardized measures at the beginning and end of each semester. In sum, our lessons had to be big enough to be inclusive of the needs of all the various learner profiles of the ESL students, whether this be mediation in language, concepts, strategies, or explicit instruction in content details (i.e., cultural capital)—or combinations of these.

Some Outcomes as Measured on the English Examination

By June 2002, 51 students from these four cohorts of ESL learners had passed through our school and had attempted the provincial English literature examination. Although the content of the examination changes every sitting (there are five sittings a year), the blueprint for the examination remains stable, and sophisticated statistical tests are imposed on the results to determine test reliability and validity. After each sitting, an Examiner’s Report detailing results is issued, and this can be accessed on the Provincial Ministry’s Web site (Alberta Learning, 2002).

The examination consists of two parts. Part A (written component) involves a reader's response to literature (15% of the total exam mark) and a literary composition (35% of the total exam mark). Part B (reading) consists of 70 multiple-choice questions that test students on curriculum content and thinking (process). Students are asked to understand content classified as meanings; critical response; and human experience and values at the literal level, the inference level, and evaluation level.

Table 2 displays the students' total English grade 12 mark: 50% derived from the school-based mark, 50% reflected in the provincial examination result, and the overall (combined) total.

We noted the wide discrepancy between the school mark and the examination mark for cohort A students. These students sat the examination in January 1998. The school principal drew our attention to their results during her routine review and analysis of the examination outcomes, which must be addressed in the school improvement plan. Her alertness to this issue became the impetus for identifying and working with young-arriving ESL learners who are ill-prepared for the demands of English literature study (Roessingh & Kover, 2002). We noted that outcomes for subsequent cohorts of students of various learner profiles clustered tightly between 55% and 65%: all with approximately 60% for the total average for the course, the target we had set. Most significant is the increase from 43% to 55% on the examination for the younger arrivals (cohort B) who received ESL support throughout high school. On further analysis, we noted significant discrepancies between Part A and Part B of the examination. We turn to these results below.

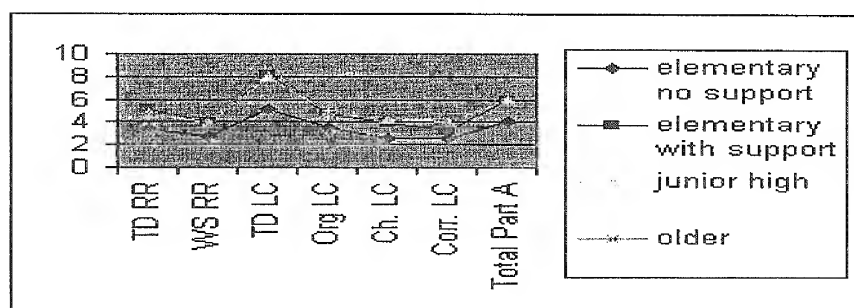
Part A of the examination offers better insights into our students' ability to engage and respond to the questions asked: generally, a question that targets a core concept about the human condition as it is understood through reference to the literature selections the student may choose, and then bring to the personal level to demonstrate meaning and understanding. Examples from past exams include responding to a challenge, making a choice, a turning point in life, and life's inescapable realities. Students are judged by

Table 2
Grade 12 English Results for Cohorts A-D

<i>Cohort</i>	<i>Average School Mark</i>	<i>Average Exam Mark</i>	<i>Average Total</i>
A (<i>n</i> =6) young arrivals, no ESL support	74	43	59
B (<i>n</i> =8) young arrivals, ESL support	58	55	57
C (<i>n</i> =19) junior high arrivals, ESL support	68	56	63
D (<i>n</i> =18) senior high arrivals, ESL support	66	53	59

Table 3
English Examination Results for Four Cohorts of ESL Learners, Part A

Cohort	TD RR	WS RR	TD LC	Org LC	Ch. LC	Corr. LC	Total Part A
elementary no support	3.38	2.75	5.2	3.5	2.63	2.50	40.7%
elementary with support	5.06	3.94	8.13	4.78	3.94	3.28	59.8%
junior high	4.75	3.96	7.93	4.88	4.29	4.01	59.6%
Older	4.85	4.36	8.88	4.77	4.55	4.5	63.8%



way of a 5-point framework that includes: thought and detail (TD), writing skills (WS), organization (Org), and matters of choice (Ch), matters of correctness (Corr). The reader's response (RR) is weighted less heavily (15%) than the Literary Composition (LC), which counts for 35%. Part A and B each count for 50% of the overall mark. Table 3 looks at the results of Part A, the part we noted that was far more reflective of the students' school-based mark than Part B.

Table 3 illustrates how each cohort of ESL learner fared on each subscale for Part A. The accompanying line graph displays the same information visually. We have weighted the subscores to reflect their relative contribution to the total score for Part A, reported here as a percentage.

The most salient aspects of these results include:

- A generally flat profile for Cohort A: The young arrivals who struggled throughout their years in the school system with little, if any, ESL support. They receive fail marks across all subscores on Part A except for Thought and Detail, Literary Composition, where they receive a marginal pass. They fail both Part A (average of 40.7%) and Part B (45%). The average examination score is 43%.
- Gains on all subscores for Cohort B (compared with Cohort A) on Part A (59.8%). Most striking is the increase in the Thought and Detail subscore on the major assignment (literary composition) for younger-arriving ESL learners who received ESL support throughout

high school. These are crucial marks to get on the exam because they are weighted the heaviest of all the subscore marks.

- Although the outcomes vary, more striking is the overall convergence of the marks on Part A toward 60%. This is generally consistent with the school-based mark and our target for our students.
- Part B of the exam, the 70 multiple-choice questions, produced consistently dismal results across all learner profiles. The scores calculated in percentages ranged from 44 to 52, thus a spread of 6-20 points below the Part A scores, with Cohort D (older arrivals) showing the largest discrepancy between the written response of Part A and the multiple choice format of Part B.

Interpretation and Discussion

The findings suggest that instructed ESL support that is extended beyond the usual exit point for ESL learners into the mainstream can benefit learners of all profile types: young arrivals, junior high arrivals, and senior high arrivals.

The wide discrepancy in the school and examination marks for Cohort A learners (young arrivals/no ESL support), we believe, may be attributed to "good will" marks awarded by well-meaning mainstream English language arts educators who may not have had sufficient insights into the learning needs and patterns of young-arriving ESL learners, who sound good and appear to be academically competent, judging from their performance in content courses such as mathematics where the linguistic threshold is lower (Roessingh & Kover, 2002). They appear to have been unwitting participants in a benevolent conspiracy that ultimately produced devastating consequences as reflected in the examination results and the subsequent failure in students' pursuit of postsecondary studies. Once this issue had been identified, we placed far greater emphasis on monitoring and evaluating work completed in class, either independently or with support, in groups or individually.

Especially heartening for us is the finding that even after years of no instructed support for the youngest arrivals, it may not be too late to make sufficient gains for future academic success. The human brain may not harden within what was previously thought to be a critical window of time, but rather has far more plasticity and malleability for ongoing language learning and the attendant concepts. These young arrivals, however, have something to learn about study skills and effort. Although the older-arriving ESL learners provided inspiring role-modeling in this regard—often spending several hours each evening on reading novel selections and Shakespeare, writing and rewriting major essay assignments—on top of the homework demands of (usually) two other core academic subjects (e.g., mathematics, physics, chemistry), the younger arrivals more frequently needed prodding to turn work in on time, use their class time more effectively, and be willing

to read extensively in their spare time, even beyond that required by the English language arts curriculum. This is partly reflected in their school-based mark of 58%. On the other hand, we began to understand the overwhelming and sometimes crushing demands placed on the younger arrivals by the school curriculum, their parents, and other students in the class (the older arrivals, including often an older sibling) who learned with greater ease. These findings are counterintuitive to the younger-the-better myth, which places high expectations on younger arrivals who sound good and have had the assumed benefit of more years of educational experience in L2.

The apparent success of the strategy to delay entry into the grade 10 English course until the grade 11 year and focusing attention on the notion of *threshold* for participation in the literature program also appears to have been of benefit for the ESL students. We believed that a GE 7 for registration in grade 10 English—while still reflecting a three-year gap—would be manageable with strong, mediated support: representing the zone of proximal development (Vygotsky, 1978) or comprehensible input +1 range (Krashen, 1989). The bar, therefore, is set quite high: in fact, significantly higher than that set by other researchers. The goal of our work had been for marks on the examination in the range of 55-60%, and the majority of the students indeed fell within this range. This means, however, that an ESL learner reading at GE 5 on entry into grade 10 (equated approximately with the 15th percentile on a standardized reading measure), must move to approximately the 50th percentile to compete academically in an (academic track) English literature course (in the first year, “skills booster” year) and to approximately the 65th percentile of the general high school student population by grade 12 English, in order to reach the goals we had targeted and move successfully into a university setting. Many faculties across Canada now require high school averages of 83% and over (e.g., engineering, management). To achieve this average, the marks in high school mathematics, chemistry, and physics must be very high to offset an English mark of 55-60%. This is a tall order by any stretch of the imagination, one that requires ongoing ESL support as the demands of mainstream English literature study increase, coupled with hard work from our students.

These outcomes challenge the findings of other researchers that suggest ESL students may leave ESL programs and pursue their academic goals without further language support on reaching the 23rd to the 50th percentile on standardized district or state achievement measures (Olsen, 1989; Collier, 1995). These thresholds, it would seem, are arbitrarily set by the exigencies of ESL funding formulas rather than any commitment to support ESL learners until they achieve commensurate with their academic abilities in their second language.

We believe that a mark of 55-60% on the examination reflects sufficient linguistic acumen or strength to continue with university level studies. The

more significant piece of this equation is the students' achievement in the Thought and Detail category (literary composition) on Part A of the exam, which we believe is a stronger predictor of future academic success than Part B, which uniformly reflects failing and marginal marks across all learner profiles.

A few of the older-arriving students were required to sit the TOEFL (Test of English as a Foreign Language) examination for entrance to university. This is a discrete-point examination that measures knowledge of linguistic elements, but not concept understandings or metaphoric competence. The scores averaged 230 (computer-based examination), sufficient for first-year entrance to our local university (the University of Calgary requires a minimum score of 220). These same students were involved in a Canadian Language Benchmarks study (Watt & Lake, 2000) and received scores of 7 and 8 (on a 12-point scale). Ongoing tracking of these students through university reflects pass marks in their course work. The preferred programs of study include engineering, computers, pure sciences, and business (management). But here too students report facing another wall. Ongoing tracking of ESL students' success both in undergraduate and graduate programs would be useful to provide insights into this phenomenon.

ESL learners are vastly underrepresented in the standard of excellence on the grade 12 provincial English examination. In January 2002, one student achieved this distinction for the first time in all the years we have been teaching. This student was older-arriving and of course exceptional. A follow-up talk-aloud protocol of his approach to the examination revealed a highly strategic (reasoning) approach to the examination both in preparing for Part A (e.g., recognizing that the 40 or so previous topics for the written response actually could be distilled to just three: challenges, dreams, and self-discovery) and Part B (e.g., eliminating distracters, strategic guessing) to compensate for his linguistic shortfall at this stage of his CALP development.

Although we would judge all our ESL learners to be linguistically as well as academically competent, we are perplexed at their continued lack of achievement commensurate with their perceived abilities. We wondered whether 60% on the examination began to approach a ceiling (we called it a wall) for ESL learners. What lies on the *other* side of the 60%? It becomes important to understand that literacy and academic proficiency do not operate in a vacuum. Every day we are called on to perform in the context of the demands of the dominant culture: the values, beliefs, and assumptions that are privileged to those who "have it"; these may be inaccessible to those who do not. These are part of the everyday unconsciousness of dominant culture members: the internalized ways of knowing and understanding the world that are represented by way of metaphor. Thus even if ESL learners understand the embedded and often universal concepts of *choice, life's inescapable realities, taking risks, turning points, personal response to crisis, loss/letting*

go, for example, they may not recognize these when they are contextualized by way of unfamiliar metaphors (e.g., *The Dance*, *The Road Not Taken*, *The Rose*). Although a good teacher can often bring to the level of critical awareness (i.e., from the unconscious to the conscious level) just those metaphors that require mediation to transcend and to help students make meaning, when the cultural ambassador/interpreter (i.e., teacher) is removed and the student must work independently in an examination setting, the challenge to an ESL learner appears to be overwhelming.

Conclusion

Developing academic proficiency in a second language is a long and uneven process. It requires ongoing support as the shape of the learner profile changes and shifts from first-language dominance to second-language dominance, as it surely must in the context of immigrant children's educational experiences in Canada (De Vries, 1999). Although we recognize the value and the place of first language in a child's unfolding sense of identity as well as his or her cognitive development, the goal of full/balanced bilingualism is largely unrealistic and unattainable for most ESL students in our classrooms. Indeed, even the maintenance and development of quality ESL programming continues to be threatened. We have been fortunate, together with our students, to have had the opportunities to place our practice under a microscope and examine the effect of what we do on the learner outcomes that matter for our ESL students. Grade 12 English is a high-stakes game for them. Their entire future depends on a pass mark in this course; moreover, a pass mark that reflects sufficient cognitive academic language proficiency to accept the next challenge in their educational journey in university.

We seek to put some precision to the concept of CALP and to understand more clearly what it is beyond CALP that ESL learners struggle to attain. We have come to understand that the concept of CALP is a shifting, dynamic idea that is made manifest differently below the surface for those students with less developed L1 to draw on than for students who have CALP level proficiency developed in L1, but who may be temporarily disadvantaged by their lack of L2 proficiency. This has important instructional implications. Moreover, the younger-arriving students remain at prolonged risk, even in their university studies, due to the inadequacy and underdevelopment of the conceptual networks that support CALP-like proficiency. Thought processes that involve reasoning, synthesis, integration, analysis—in short, the higher-order thinking skills that are located in the depths of the iceberg model—may take much longer to develop in L2 for these learners. Many ESL learners will never know their potential to think at this level. Like BICS, which has two components—basic skills and interpersonal communication—CALP is composed of linguistic proficiency and cognitive academic concepts and skills. Linguistic proficiency (communicative competence) can mask the lack of

concept development among young arrivals. Older arrivals can develop their L2 linguistic proficiency fairly quickly, as it is supported already by basic skills (they need to develop interpersonal communication) and deep, CALP-like proficiency in L1.

Many questions arise about the idea of metaphoric competence and the possibility of our learners ever becoming familiar enough with the dominant culture's ways of knowing/believing and making sense of a world that after all contains many universalities. Our work with ESL learners suggests that we are much more alike than not: life's inescapable realities and the human condition are just that. It is the particularity of the cultural context through which we understand these universalities that is sometimes difficult to transcend and to mediate.

As classroom practitioners, we think of ourselves as learners too: always learning more about the immigrant students who are entrusted to our care. It is our responsibility to understand the processes at play and to target our professional efforts at improving conditions of teaching and learning for ESL students, who are fast becoming *the* mainstream. Further, it is our responsibility to use the results of our work to advocate for educational policy reform such that barriers to participation in educational institutions are removed. Our work ahead is just unfolding.

Acknowledgments

The authors would like to thank the principal of the school, Diane Field, for her concern, care, and support of the ESL and English Department's work in improving teaching and learning for ESL students. Her monitoring of the English examinations in January 1998 alerted us to the need to identify the ESL at-risk young arrivals and to reclaim the potential of the younger-arriving ESL learners in our school. We thank Jim Cummins for taking the time to read and to provide encouraging feedback on an earlier draft of the article. We extend our gratitude to our colleagues Angela Takla and Laura Anderson Ho for reviewing our work at an early stage. As well, the feedback from the anonymous readers who reviewed our manuscript for the *TESL Canada Journal* has been helpful in strengthening the presentation of our work. Finally, we thank Sandie Kourtizin and Pat Mathews, co-editors of the *TESL Canada Journal*, for their steadfast support and encouragement for our work and shepherding it through the process to publication.

The Authors

Hetty Roessingh is a long-time ESL practitioner with the Calgary Board of Education. Her interests in classroom-based research have evolved from tracking, to curriculum design and development, materials design and development to assessment, and always advocacy. In July 2000, Hetty joined the Faculty of Education, University of Calgary, where she teaches in the MEd TESL program.

Pat Kover is Head of the English Department at Queen Elizabeth High School, Calgary. Pat's interest in classroom-based research as a way of understanding teaching and learning for ESL students in mainstream settings made for a natural collaboration with the ESL program. Pat is currently enrolled in doctoral studies at the University of Calgary.

References

- Alberta Learning (2002). *Examination manager's report*. [On-line] Available: www.learning.gov.ab.ca/k_12/testing/diploma/emr/default.asp
- Ballard, R. (1987). *The discovery of the Titanic*. Toronto, ON: Viking/Madison Press.
- Baxter, J. (1999, December 11). Canada recruiting the educated: Policy creating "brain gain" in sciences. *Calgary Herald*, A15.
- Chow, H. (2000). The determinants of academic performance: Hong Kong immigrant students in Canadian schools. *Canadian Ethnic Studies*, 32(3), 105-110.
- Collier, V. (1995). Acquiring a second language for school. *Directions in Language and Education, National Clearinghouse for Bilingual Education*, 1(4). Retrieved May 5, 2001, from www.ncbe.gwu.ncbepubs/directions/04.htm
- Cummins, J. (1980). The entry and exit fallacy in bilingual education. *NABE Journal*, 4(3), 26-60.
- Cummins, J. (1981). *Bilingualism and minority language children*. Toronto, ON: OISE Press.
- Cummins, J. (1984). *Bilingualism and special education: Issues in assessment and pedagogy*. London: Multilingual Matters.
- Cummins, J. (1996). *Negotiating identities: Education for empowerment in a diverse society*. Ontario, CA: California Association for Bilingual Education.
- Dawson, C. (1998, November 14). ESL student numbers strain public board. *Calgary Herald*, p. B9.
- Derworiz, C. (2001, October 28). Rapid growth leaves ESL classes underfunded: Language comes first, says group. *Calgary Herald*, p. C1.
- De Vries, J. (1999). Foreign born language acquisition and shift. In S. Halli & L. Dreidger (Eds.), *Immigrant Canada: Demographic, economic and social challenges* (pp. 261-281). Toronto, ON: University of Toronto Press.
- DiCerbo, P. (2000). Lessons from research: What is the length of time it takes limited English proficient students to acquire English and succeed in an all-English classroom? *Issue and Brief, National Clearinghouse for Bilingual Education*, 5. Retrieved May 5, 2001, from www.ncbe.gwu.edu
- Employment and Immigration Canada. (1985). *Annual report to parliament on future immigration levels*. Ottawa: author.
- Hakuta, K., Butler, Y., & Witt, D. (2000). *How long does it take English learners to attain proficiency?* (ERIC Document Retrieval Service No. ED 443275)
- Klesmer, H. (1994). Assessment and teacher perceptions of ESL student achievement. *English Quarterly*, 26(3), 8-11.
- Krashen, S. (1989). We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. *Modern Language Journal*, 73, 104-114.
- Lucas, T., Henze, R., & Donato, R. (1990). Promoting the success of Latino language-minority students: An exploratory study of six high schools. *Harvard Educational Review*, 60, 315-341.
- McInnes, C. (1993, May 3). First you have to learn English. *Globe and Mail*, p. A1.
- Miller, G., & Gildea, P. (1987). How children learn words. *Scientific American*, 257, pp. 86-91.
- Neu, D., & Taylor, A. (2000). Funding mechanisms, cost drivers and the distribution of education funds in Alberta: A case study. *Alberta Journal of Educational Research*, 46, 214-232.
- Oakes, J. (1993). Tracking, inequality and the rhetoric of school reform: Why schools don't change. In H.S. Shapiro & D.E. Purpel (Eds.), *Critical social issues in American education* (pp. 85-101). White Plains, NY: Longman.
- Olsen, R.E. (1989). A survey of limited English proficient student enrollments and identification criteria. *TESOL Quarterly*, 23, 469-488.
- Rinehart, D. (1996, November 21). The ESL quandary. *Vancouver Sun*, Saturday Review, pp. D4-5.
- Roessingh, H. (1995). Teaching to diversity: Meaningful inclusion of ESL students in high school mainstream settings. *Exceptionality Education*, 5(1), 65-83.

- Roessingh, H. (1999). Adjunct support for high school ESL learners in mainstream English classes: Ensuring success. *TESL Canada Journal*, 17(1), 72- 86.
- Roessingh, H., & Kover, P. (2002). Working with younger-arriving ESL learners in high school English: Never too late to reclaim potential. *TESL Canada Journal*, 19(2), 1-20
- Roberts, C. (1994). Transferring literacy skills from L1 to L2: From theory to practice. *Journal of Educational Issues of Language Minority Students*, 13, 209-221. Retrieved May 5, 2001, from <http://www.ncbe.gwu.edu/miscpubs/jeilms,vol13/transf13.htm>
- Skutnabb-Kangas, T. (1981). *Bilingualism or not*. Clevedon, UK: Multilingual Matters.
- Summerfield, R. (2002). Educated immigrants frustrated in job hunt. *Calgary Herald*, September 16, B1-2.
- Thomas, W., & Collier, V. (1997). School effectiveness for language minority students. *NCBE Resource Collection Series Number 9*. Washington, DC: National Clearinghouse for Bilingual Education.
- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Watt, D., & Lake, D. (2000). *Canadian Language Benchmarks-TOEFL research project. A comparison study of the Canadian Language Benchmarks Assessment and the Test of English as a Foreign Language*. Calgary, AB: University of Calgary, Faculty of Education.
- Watt, D., & Roessingh, H. (2001). The dynamics of ESL dropout: Plus ca change ... *Canadian Modern Language Review*, 58, 203-222.
- Zhang, C., Ollila, L., & Harvey, C. (1998). Chinese parents' perceptions of their children's literacy and schooling in Canada. *Canadian Journal of Education*, 23, 182-190.